elcome to Halibut Point, a uniquely beautiful coastal landscape. Looking seaward on a clear day, the view stretches from Crane Beach in Ipswich to Mount Agamenticus in Maine and the Isles of Shoals off the coast of New Hampshire.

The park is managed for scenic, historic and conservation purposes. It is administered cooperatively by the Massachusetts
Department of Environmental Management (Halibut Point State Park) and The Trustees of Reservations, a Massachusetts nonprofit conservation organization (Halibut Point Reservation). The Trustees first acquired property here in 1934; the adjoining land was purchased by the state in 1981. An adjacent property, Sea Rocks, is owned by the Town of Rockport and open for public use.

We invite you to explore the park's trails and tidepools, to picnic on its rocky ledges, to enjoy its sweeping views, and to learn about Cape Ann's historic granite industry.



DEM archives

## Babson Farm Quarry Self-guided Walking Tour

Tour stops 1 through 9 are marked by numbers painted on granite blocks along the trail.

#### 1. The Babson Farm Quarry

When quarrying ended here in 1929, rain, run-off, and springs on the quarry floor quickly filled the pit with water. Until the mid-19th century, quarrymen kept their working area dry by removing water by hand, a bucket at a time, or by harnessing a team of oxen to a winch. Some quarries installed wind-powered pumps, but by the 1860s, most used steam engines, running day and night, to remove water. At its deepest point, the Babson Farm quarry is about 60 feet deep.

#### 2. Derricks

Cape Ann granite weighs 168 pounds per cubic foot. Moving stone from the floor of the quarry to the surface posed a major challenge to 19th-century technology. Borrowing techniques that were used on large sailing ships, quarrymen devised an arrangement of blocks-and-tackles and pulleys called a *derrick* to hoist the heavy stones. Each derrick had a tall vertical post called a *mast*, and a horizontal arm called a *boom*. Before steam engines became available in the 1860s, derricks were powered by hand or by teams of oxen. Steam engines made it possible to hoist and move larger blocks of granite from the quarry floor. The granite blocks in front of you supported a *donkey engine* which rotated the mast and boom of a nearby derrick.

During the quarry's busiest years, circa 1910, there were four derricks in use here. One had a 96-foot mast and an 80-foot boom. It could lift 40 tons. In 1912, an even bigger one capable of moving larger blocks was erected with a mast that towered 107 feet.

## 3. Dog Holes

The single round hole on the face of this piece of granite is called a *dog hole*. Large granite blocks typically had a dog hole drilled into each end to hold the tips of giant hooks called *dogs* that were suspended by cables and chains from a derrick. The loop of chain tightened the grasp of the dogs as the block of granite was lifted from the quarry.

Once the block reached the surface, it was moved by oxen, horses or train to nearby sheds where men shaped it into paving blocks, curbing, building stone or ornamental pieces. Here at Halibut Point granite was transported directly to the wharf at Folly Cove where it was then shipped to its destination.

#### 4. Dead Men

Large iron staples like the one in front of you were known as *dead men*. It took at least six cables, all attached to the top of the mast and then anchored to dead men like this one, to hold a derrick in place.

The orange-brown granite across the quarry to your left is called *seam-faced* granite. It was colored over many thousands of years as water seeped through the naturally-occuring cracks in the granite, causing the iron-containing minerals in the granite to oxidize or 'rust'. During the 19th century, this *sapstone* was considered undesirable because of its color, but after 1900 it came into fashion as veneer for the surfaces of buildings. After being removed from the quarry, it was taken to a cutting shed, cut into pieces several inches thick, and polished to a high gloss.

A quarryman's basic tool kit: plug drill, tracer, hammer, wedge with half-rounds and spoon



## 5. Working a Motion

The small body of water in front of you was once an active *motion*, the quarrymen's term for a small quarry. A motion was generally worked by two men who used drills and hammers to produce the rectangular blocks called *paving stones* that were used for surfacing streets and public spaces.

Behind the motion is the foundation of a coal-burning power plant that generated steam to run the drills and derricks, and behind that the remains of a railroad embankment. In 1910, the quarry's owner, the Rockport Granite Company, purchased a steam engine and named it "Nella". It hauled

granite from the quarry site to the wharf at nearby Folly Cove where the stone was loaded onto specially designed sloops that carried it to markets all over the hemisphere.

#### 6. Splitting the Stone

In the early days of the granite industry on Cape Ann, granite was split by making holes with a flat chisel and then by driving flat wedges down into the holes. Some split stones can still be found around the park that show signs of these rectangular holes. By the late 1830s, the process was greatly improved: new chisels with shallow V-shaped cutting edges were struck with a hit-turn-hit-turn motion. This technique made circular holes into which half-round shims like the ones still in this stone were inserted. A tapered wedge was driven between them, splitting the stone. Even with this improved technology, nearly 75% of the large blocks split crookedly and had to be relegated to the grout pile.

#### 7. The Grout Pile

You are standing on a large grout pile, a mountain of waste granite pieces dumped here over a period of many years. If you walk to the end of the pile, face the ocean and look to your right toward the horizon, you will see a small part of the proposed Sandy Bay Breakwater. In 1885, construction of the breakwater began off the coast of Rockport to provide a safe haven midway between Boston and Portland for sailing ships. Lack of continued federal funding and the decline of sailing ships brought the project to a halt in 1915. Much of the granite from the Babson Farm Quarry went into building the breakwater which is now considered a hazard to navigation.

PLEASE DO NOT CLIMB ON THE SIDES OF THE GROUT PILE: THE STONES ARE UNSTABLE AND VERY DANGEROUS.

#### 8. Steam-powered Drills

The diameter of the drill holes in this split piece of granite, as well as their smoothness, is an indication that they were made with a steam-powered drill. When steam drills were invented in the 1880s, it became possible to cut deeper holes and thus quarry larger pieces of stone. Before steam drills came into use, even the deep holes needed for blasting were made by hand, sometimes with drills over six feet long, that were struck with large hammers.

#### 9. Bollards

Originally cut and shaped by hand, granite bollards like this one were set in the shore or on wharves to secure the lines of ships. Eventually, steam-powered lathes came into use that could shape rectangular pieces of granite into bollards as well as ornamental columns. Many of the vessels that tied their lines onto granite bollards carried Cape Ann granite along the coast and throughout the hemisphere for



use in constructing bridges, tunnels, buildings, warehouses and monuments, as well as to pave thousands of city streets as far away as Havana, Cuba and Valparaiso, Chile.

The Babson Farm Quarry here at Halibut Point, along with most of the other quarries on Cape Ann, closed in 1929. Within a year, in part because of the general economic climate of the country, the Rockport Granite Company went out of business. The growing preference for steel-framed buildings and for asphalt and concrete road surfaces guaranteed that the industry would never recover. Today, a single granite quarry remains in operation on

Cape Ann; several others are active across New England, the best-known being in Barre, Vermont. Most granite for the American market is now quarried in Texas, with some imported from as far away as India and China.

#### **Brochure Recycling**

You are welcome to take this brochure with you, but if you are finished with it, please recycle it at the Visitors Center or in one of the boxes provided.

## Visitor Guidelines

Halibut Point State Park Gott Avenue Rockport, MA 01966 (978) 546-2997

The park is open from 8:00am to 8:00pm daily from Memorial Day to Labor Day; a parking fee is charged. From Labor Day to Memorial Day the park is open from sunrise to sunset.

Please, no:

- -quarry swimming
- -alcoholic beverages
- -Hres
- -pets off-leash
- -motor vehicles or bicycles -removing of park resources, including
- removing of park resources, incluplants and animals



The Department of Environmental
Management cares for and oversees the
natural, cultural and historic resources of
Massachusetts. It provides public recreational
opportunities which are environmentally

sound, affordable and accessible to all. Its responsibilities include the management of the state's forests and parks system, water resources, waterways and dams.



Founded in 1891, The Trustees of Reservations is a member supported nonprofit conservation organization. It preserves, for public use and

scenic, historic and ecological value in Massachusetts and works to protect special places across the state.



An Essex National Heritage Area Site

Printed in 1999 on recycled paper.

This brochure can be made available in other formats upon request. Call DEM's Universal Access Office at (413) 545-5353. For a free copy of the Massachusetts State Forests and Parks Guide to Recreation call DEM's Office of Public Information, (617) 727-3180.

www.state.ma.us/dem/
E-mail: Mass.Parks@state.ma.us

Argeo Paul Cellucci, Governor Jane Swift, Lt. Governor Bob Durand, Secretary Peter Webber. Commissioner

#### Friends of Halibut Point State Park

The Friends of Halibut Point State Park is a non-profit group formed in 1985 to support the park and its mission. Its objectives include the improvement and protection of park facilities, enhancement of the park's natural beauty, and the collection and preservation of artifacts related to granite quarrying on Cape Ann. Through fund-raising efforts the group has provided seed money for a granite museum, purchased tools for granite-splitting demonstrations, augmented the park maintenance budget, and contributed matching funds for windows in the Visitors Center. Friends serve as park volunteers, staffing the Visitors Center, conducting tours and providing hospitality at park events.

Membership information is available at the Visitors Center or by writing to the Friends of Halibut Point State Park, P.O. Box 710, Rockport, MA 01966.

## Visitors Center

Located in a renovated World War II fire-control tower near the edge of the Babson Farm quarry, the center features exhibits related to the park's natural and cultural history. The tower itself, the only one of its kind open to the public along the New England coast, was used during the war to provide aiming information to the crews of the massive guns that protected Boston and Portsmouth from attack by sea. Today, the 60-foot tall structure offers panoramic views that extend as far north as the coast of Maine.

Water is conserved through the use of composting toilets and a graywater recycling system. In addition, a photovoltaic system generates electricity, solar/thermal panels provide hot water, and a geothermal pump augments the building's heating/cooling system. The building also serves as the park's administrative headquarters.

# Public Programs

Weekends, from Memorial Day through Columbus Day, tours of the quarry are offered by staff and volunteers; each Saturday morning the tour includes a granite-cutting demonstration. Other programs spotlight the park's natural history, including wildflower walks and tidepool programs during the summer and seabird walks during the winter. Check the bulletin boards in the parking lot and at the Visitors Center or call the park for information on upcoming programs.

Most areas of the park and Visitors Center are universally accessible. Assisted-listening devices are available for park tours.

Photo by Bill Byrne, Department of Fisheries and Wildlife. Other photos by John Nove, DEM.



#### **Directions to the Park**

Take Rt.95/128 north to Rt.128 north toward Gloucester and Rockport. After crossing the Annisquam River bridge, go three-quarters around the first rotary, following signs for Rt.127 north (Annisquam and Pigeon Cove). After approximately 6 miles, turn left at the park sign and the Old Farm Inn onto Gott Ave. From downtown Rockport, drive north on Rt. 127 approximately 3 miles, turning right onto Gott Ave.





The park's large grout pile (a granite waste heap) is a popular scenic overlook and winter birding site.



## History

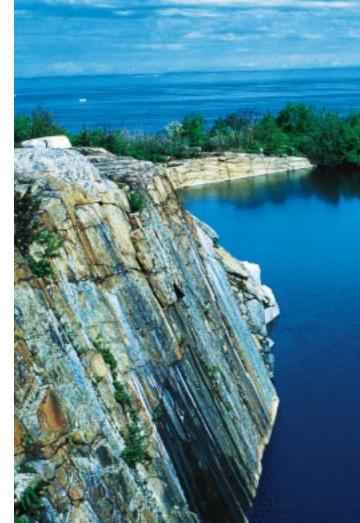
Halibut Point itself is made of sheets of 440 million year-old granite that now descend from a rocky headland to the tidal pools below. As a result of the shallow soil, constant exposure to onshore winds, and a history of frequent fires, the vegetation includes few trees. Catbriar, bayberry, blueberry, arrowwood, shadbush and an assortment of wildflowers grow among the ledges. Each winter, many species of seabirds, including loons, grebes, ducks and an occasional puffin, feed in the rich offshore waters.

The area was first used by groups of Pawtucket Indians who migrated seasonally to the coast to harvest its plentiful supply of wild fruits, fish and game. With the arrival of the first settlers late in the 17th century, the shallow soil was used for farming and cattle grazing. Samuel Gott, a weaver, was the area's first resident. His home, built in 1702 still stands just north of the park entrance. (The Gott House is privately owned and not open to the public.) It was probably during this era that the area got its name because sailing ships would tack or 'haul about' off here to round Cape Ann.

Beginning in the 1840s, granite was quarried from this area, first on a small scale and primarily along the coast, and then on a much larger scale when the Rockport Granite Company acquired the Babson Farm quarry and expanded its operation.

Shortly after the Cape Ann granite industry collapsed in 1929, 17 acres on the eastern side of the quarry were purchased and given to the Trustees of Reservations. The remainder of the area sat unused until late in World War II when a fire control tower (now the park's Visitors Center) was constructed to provide aiming information for the massive coastal defense guns that guarded Boston and Portsmouth Harbors. Following the war, basic research conducted here by MIT's Lincoln Labs contributed to the development of radar. Halibut Point fell into private hands in 1956 and was operated as a private park for one season. After several attempts to develop the area as an exclusive residential community, local pressure led to the purchase of 56 acres by the state and the opening of Halibut Point State Park in 1981.

# Halibut Point State Park





Massachusetts Department of Environmental Management Division of Forests and Parks